

Remarks

Claims 1-5 and 10-15 are now pending in this application. Claims 10-12 are withdrawn from further consideration by the Examiner as being directed to non-elected inventions. Applicants have amended claim 1 and presented claim 15 to clarify the claimed invention. Applicants respectfully request favorable reconsideration of this case.

Applicants have amended claim 1 to address the rejection under 35 U.S.C. § 112, second paragraph. Applicants submit that antecedent basis exists for all terms and respectfully request withdrawal of this rejection.

The Examiner rejects claim 1 under 35 U.S.C. § 102(a) as being anticipated by U.S. patent publication 2003/0052108 to Rappl et al. The Examiner rejects claims 2-4 under 35 U.S.C. § 103(a) as being unpatentable over Rappl et al. The Examiner rejects claims 5, 13 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Rappl et al. in view of U.S. patent 4,594,498 to Ueguri et al.

Rappl et al. does not disclose the invention recited in claim 1 since, among other things, Rappl et al. does not disclose a simulation model or calibrating a simulation model. Rather, Rappl et al. discloses a calibration method for calibrating a power supply and a robot. According to Rappl et al., predetermined parameter set values are compared with actual values received from a command signal. Compensation curves are calculated in order to correct an error in the command signal.

On the other hand, the invention recited in claim 1 includes feeding system input parameter values into a simulation model that calculates or tunes new parameter values. Calculating compensation curves as disclosed by Rappl et al. is not the same as calculating tuning parameters as recited in claim 1. Additionally, the curve fitting method and look-up table suggested Rappl et al. do not disclose a simulation model.

Furthermore, claim 1 recites calibrating a simulation model. Rappl et al. certainly does not disclose such calibration, particularly since Rappl et al. does not disclose a simulation model.

In view of the above, Rappl et al. does not disclose all elements of the invention recited in claim 1. Since Rappl et al. does not disclose all elements of the invention recited in claim 1, the invention recited in claim 1 is not properly rejected under 35 U.S.C. § 102(b). For an anticipation rejection under 35 U.S.C. § 102(b) no difference may exist between the claimed invention and the reference disclosure. *See Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q. 841 (C.A.F.C. 1984).

Along these lines, anticipation requires the disclosure, in a cited reference, of each and every recitation, as set forth in the claims. *See Hodosh v. Block Drug Co.*, 229 U.S.P.Q. 182 (Fed. Cir. 1986); *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985); *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986); and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986).

Rappl et al. does not suggest the invention recited in claims 2-4 since, among other things,

Rappl et al. does not suggest a simulation model or calibrating a simulation model. As noted above, Rappl et al. suggests a calibration method for calibrating a power supply and a robot by comparing predetermined parameter set values with actual values received from a command signal. Predetermined set values for a values related to a power supply do not suggest a simulation model for simulating an arc welding system. Additionally, calculating compensation curves as suggested by Rappl et al. does not suggest calculating tuning parameters of a simulation model of an arc welding system. Additionally, the curve fitting method and look-up table suggested Rappl et al. do not suggest a simulation model.

In view of the above, Rappl et al. does not suggest the invention recited in claims 2-4. It follows that the invention recited in claims 2-4 is not obvious in view of Rappl et al. As a result, Applicants respectfully request withdrawal of this rejection.

The combination of Rappl and Ueguri et al. does not suggest the invention recited in claims 5, 13, and 14 since, among other things, the combination does not suggest a simulation model or calibrating a simulation model. Along these lines, the Examiner cites Ueguri et al. as suggesting models of metal transport. However, Ueguri et al. appear to suggest actual states of drops of molten metal rather than a simulation model of an arc welding system. There is nothing in col. 1, lines 11-18, nor col. 9, line 41, through col. 10, line 6, of Ueguri et al. that suggests in any way simulation model of an arc welding system.

Therefore, the combination of Rappl and Ueguri et al. does not suggest the invention recited in claims 5, 13, and 14. Accordingly, the invention recited in claims 5, 13, and 14 is not

obvious in view of the combination of Rappl and Ueguri et al. Consequently, Applicants respectfully request withdrawal of this rejection.

In view of the above, the references relied upon in the office action, whether considered alone or in combination, do not disclose or suggest patentable features of the claimed invention. Therefore, the references relied upon in the office action, whether considered alone or in combination, do not anticipate the claimed invention or make the claimed invention obvious. Accordingly, Applicants request withdrawal of the rejections based upon the cited references.

In conclusion, Applicants respectfully request favorable reconsideration of this case and early issuance of the Notice of Allowance.

If an interview would advance the prosecution of this application, Applicants respectfully urge the Examiner to contact the undersigned at the telephone number listed below.

The undersigned authorizes the Commissioner to charge fee insufficiency and credit overpayment associated with this communication to Deposit Account No. 22-0261.

Respectfully submitted,

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